Customer No. 020991 PD-970528

08-23-1999



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

TEET

101124296			
To the Honorable Commissioner of Patents and Trademarks. Please	record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Cecilia Y. Cheng,	Name and address of receiving party(ies):		
Robert R. Hayes, David A. Langsam, Andrew L.			
Strodtbeck	Name: HUGHES ELECTRONICS CORPORATION		
	Internal Address: Bldg. 001, M/S A109		
	P.O. Box 956		
	200 N. Sepulveda Blvd.		
Additional Name(s) of conveying party(ies) attached?	El Segundo, CA 90245-0956		
yes □ no 図			
Nature of Conveyance:	Street Address: Bldg. 001, M.S. A109		
■ Assignment	200 N. Sepulveda Blvd.		
☐ Security Agreement ☐ Change of Name	El Segundo, California 90245		
□ Other			
July 23, 1999, July 27, 1999, July 28, 1999	Additional name(s) & address(es) attached? ☐ yes 图 no		
4. Application number(s) or patent number(s): 67 67334	July 23, 1999, July 27, 1999,		
If this document is being filed together with a new application,			
A. Patent Application No.(s):	B. Patent No.(s):		
7 1 dione approach in the last	5. Tatom 110.(0).		
Additional numbers attached	? □ yes ❷ no		
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [1]		
Name: Datast Basarda Administration	7. Total fee (37 CFR 3.41): \$40.00		
Name: Patent Records Administration	□ Enclosed		
Address: Hughes Electronics Corporation	☐ Enclosed		
Bldg. 001, M/S A109 P.O. Box 956	Authorized to be charged to deposit account		
200 N. Sepulveda Blvd.	8. Deposit account number:		
El Segundo, CA 90245-0956	50-0383		
23/1999 DCDATES 00000019 500383 09373349	(Attached duplicate copy of this page if paying by deposit account)		
C1581 40.00 CH			
DO NOT USE TO	піэ эглое		
Statement and signature.			
To the best of my knowledge and belief, the foregoing informa-	tion is true and correct and any attached copy is a true		
copy of the original document.			
Change I Vale	Cun to man		
Registration No. 33,179 Signature Date			
	<i>y</i>		
	Total number of pages including cover sheet: [2]		

OMB No. 0651-0011 (exp. 4/94)





Page 1 of 2 PD-970528

Customer No. 020991

WHEREAS, I, as below named sole inventor (if only one name is listed below) or joint inventor (if plural names
are listed below) of the city and state as stated below next to my name, have invented a(an) Alignment System
And Method For Optical Satellite Communication for which application for Letters Patent of the United
States has been executed by me on this day, or (if the following is completed) filed on
as Serial No; and

WHEREAS, **HUGHES ELECTRONICS CORPORATION**, (hereinafter referred to as **HUGHES**), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to HUGHES, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in- part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said HUGHES, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to HUGHES, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by HUGHES, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of HUGHES, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in HUGHES, its successors, assigns or other legal representatives.

Customer No. 020991

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
CECILIA Y. CHENG	Cecilia y . Cheng		July 23, 1999		
RESIDENCE (CITY AND STATE)	· · · · · · · · · · · · · · · · · · ·	INVENTIO	N AGREEMENT DATE		
610 THE VILLAGE, #216, REDONDO BE.	ACH, CA 90277	JANUA	RY 31, 1994		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
ROBERT R. HAYES					
RESIDENCE (CITY AND STATE)			ON AGREEMENT DATE		
26052 MULHOLLAND HWY., CALABASA	S, CA 91302	NOVEN			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
DAVID A. LANGSAM	Land I Tourse.		7/27/99		
RESIDENCE (CITY AND STATE)	- Contract	INVENTIO	ON AGREEMENT DATE		
6712 W. 86th PLACE #2, LOS ANGELES, CA 90045		JUNE 2	7, 1994		
		•			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
ANDREW L. STRODTBECK	128	<u> </u>	23 July 99		
RESIDENCE (CITY AND STATE)		INVENTIO	ON AGREEMENT DATE		
123 E. OAK AVE. #207, EL SEGUNDO, C	A 90245	JULY 10), 1979		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
RESIDENCE (CITY AND STATE)		INVENTIO	DN AGREEMENT DATE		
STATE OF California)				
COUNTY OF Los Angeles) SS:)				
On July 23, 1999 before me, T. MONTGOMERY ,					
a Notary Public in and for said State, personally appeared ANDREW L. STRODTBECK************************************					
☐ personally known to me or ☒ proved to name(s) is/are subscribed to the within same in his/her/their authorized capacit person(s), or the entity upon behalf of which with the control of the control o	instrument and acknowledged to me the y(ies), and that by his/her/their signatuch the person(s) acted, executed the instruction.	at he/she/ re(s) on f	they executed the		

WITNESS my hand and official seal.

13650 CO JAN 95

T. MONTGOMERY
Commission # 1074098
Notary Public — California
Los Angeles County
My Comm. Expires Oct 1, 1999

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PATENT REEL: 010173 FRAME: 0269 Customer No. 020991

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE				
CECILIA Y. CHENG						
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE				
610 THE VILLAGE, #216, REDONDO BE	ACH, CA 90277	JANUARY 31, 1994				
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE				
ROBERT R. HAYES	Folint & Hane	7/28/99				
RESIDENCE (CITY AND STATE)	1 550000 2:1(5505	INVENTION AGREEMENT DATE				
RESIDENCE (CITT AND STATE)		NOVEMBER 14, 1977				
26052 MULHOLLAND HWY., CALABASA	S, CA 91302	140 VENIBER 14, 1377				
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE				
DAVID A. LANGSAM						
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE				
6712 W. 86 th PLACE #2, LOS ANGELES,	CA 90045	JUNE 27, 1994				
		<u> </u>				
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE				
ANDREW L. STRODTBECK						
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE				
123 E. OAK AVE. #207, EL SEGUNDO, C	CA 90245					
		JULY 10, 1979				
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE				
RESIDENCE (CITY AND STATE)	L	INVENTION AGREEMENT DATE				
RESIDENCE (CITT AND STATE)		INVENTION AGREEMENT DATE				
STATE OF Colif.	•					
STATE OF CONT.						
COUNTY OF LOS AUGELES	ý					
On 7.28.99 before me, S.L.S. ROSEN, NOTary Public						
a Notary Public in and for said State, pers		-				
Bobert R. Hayes						
☐ personally known to me or proved to me on the basis of satisfactory evidence to be the person(\$) whose name(\$) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the						
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the						
person(\$), or the entity upon behalf of which the person(\$) acted, executed the instrument.						
WITNESS my hand and official sea	I.					
S. L. S. Re						
5. L. 3. K	Notary Public 575	Repen				
Commission	# 11 3484 3 💆	Reserv				
Commission Notary Public Los Angeles 13650 CO JAN 98	# 1134843 Process County Process Cou	Reser				

PATENT REEL: 010173 FRAME: 0270

ASSIGNMENT

ADDENDUM

PD-970528

STATE OF	California))) SS:)	
COUNTY OF	Los Angeles))		
On July 23,	1999	, before me,	Donna M.	Meehan
	in and for said State, pe	 -	Cecilia	Y. Cheng
is are subscribe authorized capa behalf of which	d to the within instrumer	nt and acknowledge nisther/their signatu ecuted the instrume	ed to me that ire(s) on the	y evidence to be the person(s) whose name(s) he/spe/they executed the same in his/her/their instrument the person(s), or the entity upon
	DONNA M. MEEHA Commission # 11669 Norary Public - Califo Los Angeles Count My Comm. Expires Dec 29	N 1998 Y	Notary	y Public Donna M. Meekan
STATE OF	California)	SS:	
COUNTY OF	Los Angeles)		
On July 2	27, 1999	, before me,		. Meehan,
a Notary Public	in and for said State, pe	rsonally appeared	David A.	. Langsam
is/are subscribe authorized cap behalf of which	ed to the within instrume	nt and acknowledge his/her/their signate ecuted the instrume seal.	ed to me that ure(s) on the nt.	y evidence to be the person(s) whose name(s) (he)she/they executed the same in his/her/their instrument the person(s), or the entity upon

PATENT REEL: 010173 FRAME: 0271